



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,034	07/08/2004	Ulrich Huperz	04-370	3050
34704	7590	07/25/2006	EXAMINER	
BACHMAN & LAPOINTE, P.C. 900 CHAPEL STREET SUITE 1201 NEW HAVEN, CT 06510			CULBRETH, ERIC D	
			ART UNIT	PAPER NUMBER
			3616	

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/501,034	HUPERZ, ULRICH
	Examiner Eric Culbreth	Art Unit 3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 22-42 is/are pending in the application.
 - 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 22-42 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 July 2004 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/8/05.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The reference crossed out on the form PTO-1449 filed 4/8/05 is a duplicate (it is listed elsewhere on the form).

Drawings

2. The drawings are objected to because of the following informalities. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- a. Figure 1 appears twice in the drawings.

- b. In Figures 1 and 2 eye 10's structure is not clear, especially Figure 2.
- c. Regarding paragraph [0027], it is not clear how eye 10 is used to fasten the gas supply system to vehicle structure.
- d. Contrary to the disclosure throughout the specification, part 14 is not a "band" as illustrated.
- e. Contrary to paragraph [0028], lines 4-6, band 14 is not in seal 8 as illustrated.
- f. It is not clear where part 12 is in Figure 1 (it should be visible).
- g. Contrary to the end of paragraph [0029], it would not appear to that the material for eye 10 is taken out of seal 8 (note Figure 2, where the material for 10 is still illustrated).
- h. Generally, from Figures 1 and 2 and paragraph [0028] the structure of the invention is not clear.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the mechanically interlaced seal and plastically deformable material (end of claim 22 and claim 33) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities:
 - a. The specification should not refer to the claims to describe the invention (paragraph [0007], line 2).
 - b. The specification is generally confusing in describing the invention and should be carefully reviewed and rewritten for clarity (for instance, paragraph [0029], line 3 refers to "bands" 14, but only one band was referred to previously).Appropriate correction is required.

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

There are numerous features in the claims not described in the specification. For instance, there is no support in the specification for adhesives as the plastically deformable material or the combination of adhesives, fibers, etc. (claim 23), nor the features of claim 27, claim 28, 30 or 31. There is no support in the specification for the last three lines of claim 33, nor for claim 34, nor claim 35 (mechanical pressure). There is no support in the specification for claim 39. The claims and specification should be carefully reviewed and rewritten.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 22-42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The invention is generally not clear due to poor illustration and description; in claim 22 and claim 33 it is not clear how the seal and deformable material are interlaced, as this is not illustrated or described.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 22-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are replete with indefinite recitations and should be carefully reviewed and rewritten. Some examples are given below.

a. In claim 22, lines 1-2, "in particular" is indefinite (i.e., when the seal is recited as "in particular" for sealing an airbag conduit, it is not clear if the claim limitations require the seal being for an airbag conduit). The claims are replete with this term.

b. In claim 22, lines 2-3, "during operation" is not clear (what "operation"?).

c. In claim 22, line 4 it is not clear what the "wall of metal" is from the specification.

d. In claim 22, lines 4-5 there is no antecedent basis for "the area which seals the cross-section of the gas supply system".

e. In claim 25, there is no antecedent basis for "the whole of the cross-section enclosed by the wall of metal".

f. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent

protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 32 recites the broad recitation 0.05 to 5 mm, and the claim also recites 0.2 to 2 mm which is the narrower statement of the range/limitation.

- g. Also in claim 32 "preferably" is indefinite, failing to positively define structure (is the preferred range required to infringe the claim).
- h. In claim 33, line 5 there is no antecedent basis for "the area to be sealed".
- i. In claim 33, line 6 there is no antecedent basis for "the wall of the gas supply system".
- j. In claim 33, lines 6-7 "if necessary" is indefinite (when is this limitation infringed).
- k. In claim 33, line 8 there is no antecedent basis for "said layer of metal".
- l. In claim 33, line 10 there is no antecedent basis for "said ductile material".
- m. In claim 35, there is no clear antecedent basis for at least partially heating the area into which the layer of metal is inserted (this step was recited as being done "if

necessary" in claim 33, line 11; hence, the step is not positively included so that it can be referred to in claim 35).

n. Claim 41 recites the invention as "the use of solder alloys", but depends from claim 22, where the invention is recited as an article (a seal).

o. Claim 42 recites the invention as "the use of solder alloys", but depends from claim 33, where the invention is recited as a method of manufacturing.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 22-25 and 27-31 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent 57064427 (of record, cited by applicant).

Claim 22 recites the invention in line 1 of the preamble as "a seal for a gas supply system of metal". Hence, the only invention is "a seal" (the recitation "for a gas supply system of metal" is a functional statement in intended use, failing to patentably define distinguishing structural characteristics). Similarly, the structure in the rest of claims 22, 24 and 27 relating how the seal cooperates with the material of the supply system are also functional statements of intended use. Hence, Japanese '427's seal 3 meets the positive limitations of claim 22. Seal 3 can be aluminum (metal) (claim 23). Claim 25 is so functional and indefinite that Japanese '427 meets the positive limitations

of the claim. Seal 3 is at least aluminum (metal); in view of the indefinite recitation in claim 28 the metal is “in particular” copper alloy or copper-organic alloy, the reference meets the positive limitations of the claim. As there is no support in the specification for “natural or synthetic plastic” (claims 29-30), Japanese ‘427 meets the positive limitations of the claim. At any rate “natural or synthetic plastic” is so unclear that Japanese ‘427’s seal meets the limitation when it is made of rubber. The other limitations in claims 29-30 are statements of intended use, as the invention in the preamble of claim 22 was a seal and did not include the combination of the seal with the gas supply system. Japanese ‘427’s sealing member 3 is a film (claim 31).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 26 as best understood is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese ‘427 in view of Random House College Dictionary, c. 1980, p. 37.

Japanese ‘427 already teaches a film of aluminum, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Japanese ‘427 to include an [aluminum] alloy with a thickness of 0.05 to 5 mm, as alloys of metals are commonly used to reduce cost (dictionary definition).

14. Claim 32 as best understood is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese '427.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Japanese '427's film 3 to be 0.05 to 5 mm thick, as the specification gives no stated purpose or particular reason for the thickness, and Japanese '427 appears to work just as well with a similar thickness.

Allowable Subject Matter

15. Claim 33 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

16. Claims 34-42 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Culbreth whose telephone number is 571/272-6668. The examiner can normally be reached on Monday-Thursday, 9:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571/272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Eric Culbreth
Primary Examiner
Art Unit 3616

ec